



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/527,691	03/17/2000	Masahiko Yamaguchi	35.C14352	3713

5514 7590 10/06/2003

FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

BOWES, SARA E

ART UNIT	PAPER NUMBER
----------	--------------

2171

5

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/527,691

Applicant(s)

YAMAGUCHI, MASAHIKO

Examiner

Sara Bowes

Art Unit

2171

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 3/17/2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☒ Claim(s) 15-17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Oath/Declaration***

The oath or declaration is defective because: it was not executed in accordance with either 37 CFR 1.66 or 1.68.

The inventor's signature is not present on the declaration.

Applicant has not given a post office address anywhere in the application papers as required by 37 CFR 1.33(a), which was in effect at the time of filing of the oath or declaration. A statement over applicant's signature providing a complete post office address is required.

The post office address of the applicant is required not the post office address of the assignee.

### ***Claim Objections***

Claims 15-17 are objected to because of the following informalities: incorrect punctuation.

Referring to claims 15 and 17, it is suggested by the examiner that a semi-colon replace the colon in line 19, page 20 and line 15, page 21.

Referring to claim 16, it is suggested by the examiner to remove the unnecessary punctuation in line 26, page 20.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112, First Paragraph***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

Art Unit: 2171

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification discusses a decryption means in the output means, not an encryption means as claimed in claim 14.

***Claim Rejections - 35 USC § 112, Second Paragraph***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7 -14 are rejected as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. A connection between the two data processing apparatuses is omitted.

Referring to claims 9-14, these claims are also rejected because they are dependent on claim 8 and therefore inherit its deficiencies.

Claims 15 and 16 provide for the use of a data processing method, but, since the claims do not set forth any steps involved in the method/process, it is unclear what

Art Unit: 2171

method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 15 and 16 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8-13, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nardone et al. to U.S. Patent 5,805,700 in view of Jones to U.S. Patent No. 5,412,730.

Referring to claim 1, Nardone et al. teach a data processing apparatus comprising:

- input means for inputting data to be transmitted [see Figure 5, (CVD+), 16];

- encrypting means for encrypting the particular portion extracted by the extracting means [see Figure 5, Encryption Module, 12'];

Nardone et al. do not explicitly teach a data processing apparatus comprising extracting means for extracting a particular portion of the data input from the input means. However, Nardone et al. do teach selectively encrypting the basic transfer units within the stream of data, without extraction. By doing this, Nardone et al. do not use processor time to extract the bits and then synchronize the encrypted bits back into the non-encrypted data.

Nardone et al. also do not teach a transmitting means for transmitting the particular portion encrypted by said encrypting means and a remaining portion not extracted by the extracting means.

Jones does teach a transmitting means for transmitting encrypted and non-encrypted data [see Figure 1, 13, communication channel].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nardone et al.'s system to include Jones' teaching of a transmitting means. One of ordinary skill in the art would have been motivated to modify Nardone et al.'s as above for the purpose of allowing the data to be sent to authorized users over insecure communication channels.

Referring to claims 2 - 4 and 6, Nardone et al. as modified teach a data processing apparatus according to claim 1, wherein [see column 2, lines 46-48]:

- the data is print data, and the extracting means extracts a print control code from the print data as the particular portion.

- the data is image data whose one pixel has a plurality of bits, and the extracting means extracts predetermined upper bits of each pixel from the image data as the particular portion.
- the data is voice data encoded into codes each having a plurality of bits, and the extracting means extracts predetermined discrete bits of each code from the encoded voice data as the particular portion.
- the data is data compressed by using a conversion table, and extracting means extracts the conversion table from the compressed data as the particular portion.

Nardone et al. teach a selective encryption using video data, which is in digital format. Image data, voice data, compressed data, and print data, once read into a computer, are also in digital format.

Referring to claim 5, Nardone et al. as modified teach a data processing apparatus according to claim 4, wherein the extracting means extracts bits at a predetermined interval of bits from each code [see Figure 4].

Though Nardone et al. do not extract bits to be encrypted, they encrypt the basic transfer units within the stream of data. By doing this, Nardone et al. do not use processor time to extract the bits and then synchronize the encrypted bits back into the non-encrypted data.

Referring to claims 8, Nardone et al. teach a data processing apparatus comprising:

- analyzing means for analyzing the extracted portion extracted by the extracting means [see Figure 5, Encryption Module, 12']; and

- output means for outputting the portion analyzed by the analyzing means and a remaining portion not extracted by the extracting means [see Figure 5, {CVD+}, 18].

Nardone et al. do not explicitly teach extracting means for extracting an encrypted portion from data received by the receiving means. However, Nardone et al. do teach selectively encrypting the basic transfer units within the stream of data, without extraction. By doing this, Nardone et al. do not use processor time to extract the bits and then synchronize the encrypted bits back into the non-encrypted data.

Nardone et al. also do not teach a receiving means for receiving data and thus does not explicitly teach a decryption side.

Jones shows [see Figure 3] that the process performed on the encryption side (transmitting side) is the reverse process of that performed on the decryption side (receiving side). So with the teachings of Jones in mind, it is obvious to one skilled in the art that though Nardone et al. do not explicitly teach decryption in the above mentioned manner in order for the data to be decrypted a mirror process must occur.

Jones does teach a receiving means for receiving data [see Figure 1, 13, communication channel].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nardone et al.'s system to include Jones' teaching of a transmitting means. One of ordinary skill in the art would have been motivated to modify Nardone et al.'s as above for the purpose of allowing the data to be sent to authorized users over insecure communication channels.



Referring to claims 9 -11 and 13, Nardone et al. as modified teach a data processing apparatus according to claim 8, wherein [see column 2, lines 46-48]:

- the data is print data, and the encrypted portion is a print control code.
- the data is image data whose one pixel has a plurality of bits, and the encrypted portion is predetermined upper bits of each pixel of the image data.
- the data is voice data encoded into codes each having a plurality of bits, and the encrypted portion is predetermined discrete bits of each code.
- the data is data compressed by using a conversion table, and the encrypted portion is the conversion table.

Nardone et al. teach a selective encryption using video data, which is in digital format. Image data, voice data, compressed data, and print data, once read into a computer, are also in digital format.

Though Nardone et al. do not extract bits to be encrypted, they encrypt the basic transfer units within the stream of data. By doing this, Nardone et al. do not use processor time to extract the bits and then synchronize the encrypted bits back into the non-encrypted data.

Referring to claim 12, Nardone et al. as modified teach a data processing apparatus according to claim 11, wherein the encrypted portion is bits of each code at a predetermined interval of bits [see Figure 4].

Referring to claim 15, Nardone et al. teach a data processing method comprising:

- an input step of inputting data to be transmitted [see Figure 5, (CVD+), 16];

- an encrypting step of encrypting the particular portion extracted at the extracting step [see Figure 5, Encryption Module, 12'];

Nardone et al. do not explicitly teach a data processing apparatus comprising an extracting step of extracting a particular portion of the data input at the input step.

However, Nardone et al. do teach selectively encrypting the basic transfer units within the stream of data, without extraction. By doing this, Nardone et al. do not use processor time to extract the bits and then synthesize the encrypted bits back into the non-encrypted data.

Nardone et al. also do not teach a transmitting step of transmitting the particular portion encrypted at the encrypting step and a remaining portion not extracted at the extracting step.

Jones does teach a transmitting step of transmitting the particular portion encrypted at the encrypting step and a remaining portion not extracted at the extracting step. [see Figure 1, 13, communication channel].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nardone et al.'s system to include Jones' teaching of a transmitting means. One of ordinary skill in the art would have been motivated to modify Nardone et al.'s as above for the purpose of allowing the data to be sent to authorized users over insecure communication channels.

Referring to claim 16, Nardone et al. teach a data processing method comprising:

- an analyzing step of analyzing the extracted portion extracted at the extracting step;

- an output step of outputting the portion analyzed at the analyzing step and a remaining portion not extracted at the extracting step.

Nardone et al. does not explicitly teach an extracting step of extracting an encrypted portion from data received at the receiving step. However, Nardone et al. does teach selectively encrypting the basic transfer units within the stream of data, without extraction. By doing this, Nardone et al. do not use processor time to extract the bits and then synthesize the encrypted bits back into the non-encrypted data.

Nardone et al. also do not teach a receiving step of receiving data and thus does not explicitly teach a decryption side.

Jones shows [see Figure 3] that the process performed on the encryption side (transmitting side) is the reverse process of that performed on the decryption side (receiving side). So with the teachings of Jones in mind, it would have been obvious to one skilled in the art that though Nardone et al. do not explicitly teach decryption in the above mentioned manner in order for the data to be decrypted a mirror process must occur.

Jones does teach a receiving step of receiving data [see Figure 1, 13, communication channel].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nardone et al.'s system to include Jones' teaching of a transmitting means. One of ordinary skill in the art would have been motivated to modify Nardone et al.'s as above for the purpose of allowing the data to be sent to authorized users over insecure communication channels.

Referring to claim 17, Nardone et al. teach a computer readable storage medium storing a data processing program for controlling a computer to perform data processing [see column 4, lines 57-59], said program comprising codes for causing the computer to perform:

- an input step of inputting data to be transmitted;
- an encrypting step of encrypting the particular portion extracted at the extracting step.

Nardone et al. do not explicitly teach a data processing apparatus comprising an extracting step of extracting a particular portion of the data input at the input step.

However, Nardone et al. do teach selectively encrypting the basic transfer units within the stream of data, without extraction. By doing this, Nardone et al. do not use processor time to extract the bits and then synthesize the encrypted bits back into the non-encrypted data.

Nardone et al. also do not teach a transmitting step of transmitting the particular portion encrypted at the encrypting step and a remaining portion not extracted at the extracting step.

Jones does teach a transmitting step of transmitting the particular portion encrypted at the encrypting step and a remaining portion not extracted at the extracting step. [see Figure 1, 13, communication channel].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nardone et al.'s system to include Jones' teaching of a transmitting means. One of ordinary skill in the art would have been motivated to

modify Nardone et al.'s as above for the purpose of allowing the data to be sent to authorized users over insecure communication channels.

Referring to claim 18, Nardone et al. teach a computer readable storage medium storing a data processing program for controlling a computer to perform data processing [see column 4, lines 57-59], said program comprising codes for causing the computer to perform:

- an analyzing step of analyzing the extracted portion extracted at the extracting step;
- an output step of outputting the portion analyzed at the analyzing step and remaining portion not extracted at the extracting step.

Nardone et al. do not explicitly teach an extracting step of extracting an encrypted portion from data received at the receiving step. However, Nardone et al. do teach selectively encrypting the basic transfer units within the stream of data, without extraction. By doing this, Nardone et al. do not use processor time to extract the bits and then synchronize the encrypted bits back into the non-encrypted data.

Nardone et al. also do not teach a receiving step of receiving data and thus do not explicitly teach a decryption side.

Jones shows [see Figure 3] that the process performed on the encryption side (transmitting side) is the reverse process of that performed on the decryption side (receiving side). So with the teachings of Jones in mind, it would have been obvious to one skilled in the art that though Nardone et al. do not explicitly teach decryption in the

Art Unit: 2171

above mentioned manner in order for the data to be decrypted a mirror process must occur.

Jones does teach a receiving step of receiving data [see Figure 1, 13, communication channel].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nardone et al.'s system to include Jones' teaching of a transmitting means. One of ordinary skill in the art would have been motivated to modify Nardone et al.'s as above for the purpose of allowing the data to be sent to authorized users over insecure communication channels.

#### ***Allowable Subject Matter***

Claims 7 and 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Referring to claims 7 and 14, Nardone et al., which appears to be the best reference at the time, does not disclose the claimed synthesizing means.

These claims are patentable because it would not have been obvious to one of ordinary skill in the art to combine the synthesizing means into the system of Nardone et al. Insertion of the synthesizing means into the system of Nardone et al. would increase processor time and thus make Nardone et al.'s system less effective.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,757,913 to Bellare et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara Bowes whose telephone number is 703-305-0326. The examiner can normally be reached on 7:30-4:00, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

seb  
9/23/03

  
**SAFET METJAHIC**  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100